CONTENTS OF VOLUME 27

Vol. 27 No. 1 May 1994

Special Issue

CLIMATE CHANGE: SIGNIFICANCE FOR AGRICULTURE AND FORESTRY

Systems Approaches Arising from an IPCC Meeting

Guest Editors
DAVID H. WHITE and S. MARK HOWDEN

Editorial 1

S. BOAG, D. H. WHITE, and S. M. HOWDEN / Monitoring and Reducing Greenhouse Gas Emissions from Agricultural, Forestry and Other Human Activities 5

K. MINAMI and H.-U. NEUE / Rice Paddies as a Methane Source 13

S. C. JARVIS and B. F. PAIN / Greenhouse Gas Emissions from Intensive Livestock Systems: Their Estimation and Technologies for Reduction 27

BRIAN H. WALKER / Global Change Strategy Options in the Extensive Agriculture Regions of the World 39

S. MARK HOWDEN, DAVID H. WHITE, GREG M. MCKEON, JOE C. SCANLAN, and JOHN O. CARTER / Methods for Exploring Management Options to Reduce Greenhouse Gas Emissions from Tropical Grazing Systems 49

ROBERT K. DIXON, JACK K. WINJUM, KENNETH J. ANDRASKO, JEFFREY J. LEE, and PAUL E. SCHROEDER / Integrated Land-Use Systems: Assessment of Promising Agroforest and Alternative Land-Use Practices to Enhance Carbon Conservation and Sequestration 71

TREVOR H. BOOTH / Determining the Climatic Requirements of Trees Suitable for Agroforestry 93

WOJCIECH GALINSKI and MANFRED KÜPPERS / Polish Forest Ecosystems: The Influence of Changes in the Economic System on the Carbon Balance 103

TIMOTHY D. MOUNT / Climate Change and Agriculture: A Perspective on Priorities for Economic Policy 121

K. HEINLOTH and R. P. KARIMANZIRA / Outcomes and Policy Recommendations from the IPCC/AFOS Working Group on Climate Change Response Strategies and Emission Reductions 139

Vol. 27 No. 2 June 1994

WILFRID BACH / A Climatic and Environmental Protection Strategy, the Road Toward a Sustainable Future. An Editorial Essay 147

I. M. MASON, M. A. J. GUZKOWSKA, C. G. RAPLEY, and F. A. STREET-PERROTT / The Response of Lake Levels and Areas to Climatic Change 161

JAAP KWADIJK and HANS MIDDELKOOP / Estimation of Impact of Climate Change on the Peak Discharge Probability of the River Rhine 199

G. C. NIHOUS, S. M. MASUTANI, L. A. VEGA, and C. M. KINOSHITA / Projected Impact of Deep Ocean Carbon Dioxide Discharge on Atmospheric CO_2 Concentrations 225

Book Review
S. G. Jennings (ed.), *Aerosol Effects on Climate* (JENNIFER M. HOPWOOD) 245

Vol. 27 No. 3 July 1994

SABATINO SOFIA and PETER FOX / Solar Variability and Climate. An Editorial Essay 249

CHRISTIAN-D. SCHÖNWIESE, ROLF ULLRICH, FRANK BECK, and JÖRG RAPP / Solar Signals in Global Climatic Change 259

A. G. LAPENIS and M. V. SHABALOVA / Global Climate Changes and Moisture Conditions in the Intracontinental Arid Zones 283

DAVID A. NOEVER, HELEN C. MATSOS, RAYMOND J. CRONISE, LOREN L. LOOGER, and RACHNA A. RELWANI / Ocean-Atmosphere CO_2 Exchange: An Accessible Lab Simulation for Considering Biological Effects 299

DONG WANG and LARRY MAYER / Effect of Storm Clustering on Water Balance Estimates and Its Implications for Climate Impact Assessment 321

Book Review
B. J. Mason, *Acid Rain: Its Effects on Inland Waters* (T. E. GRAEDEL) 343

Vol. 27 No. 4 August 1994

S. W. HOSTETLER / Hydrologic and Atmospheric Models: The (Continuing) Problem of Discordant Scales. An Editorial Comment 345

M. SEGAL, P. ALPERT, U. STEIN, M. MANDEL, and M. J. MITCHELL / Some Assessments of the Potential $2 \times CO_2$ Climatic Effects on Water Balance Components in the Eastern Mediterranean 351

NICK SALAFSKY / Drought in the Rain Forest: Effects of the 1991 El Niño-Southern Oscillation Event on a Rural Economy in West Kalimantan, Indonesia 373

F. S. RODRIGO, M. J. ESTEBAN-PARRA, and Y. CASTRO-DIEZ / An Attempt to Reconstruct the Rainfall Regime of Andalusia (Southern Spain) from 1601 A.D. to 1650 A.D. Using Historical Documents 397

ANNE R. KEARNEY / Understanding Global Change: A Cognitive Perspective on Communicating through Stories 419

Volume Contents 443

Author Index 445